

**Work Order ID 80467****\*80467\***

Page 1

February-21-12 1:07:06 PM

Item ID: D117-762-041

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Replacement Skidtube

Start Date: 21/02/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 06/03/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals:

Process Plan: MLJDate: 12/02/21 Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D3492

C

D3582

Rev A

100

0.00

**\*100\***

DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile &amp; type labels per PPP D117-762-041 CHG001

N/A

120

0.00

**\*120\***

BENDING MACHINE - SKIDTUBES

CNC Bend 1

Memo

0.00

CNC Delta 100 Bender

Bend tube as per program D3582 on CNC Bender and Dwg D3582. Folio 3,  
use bending aid DT9632  
2- cut fwd end of tube as per dwgOK 12/02/23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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**NOTE:** Date & initial all entries

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Tooling:

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Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

130

0.00

**\*130\***

Skidtubes

0.00

Skidtubes

**Memo**

1-Cut Aft end using DT8185

2-Deburr ends

3-Drill Aft Cap holes using DT8678 \*\*\* OPEN AFT CAP HOLE TO .187" \*\*\*

4-Locate DT 8973 from aft cap holes &amp; Drill Ground wire hole on top of Tube.

5-Install 3/16 cleco in Ground wire hole ,then drill all X-Bolt holes using 3/16" drill.

6-Drill pilot holes for wearplates using DT8900

7-Open wearplate holes to Ø19/64" (0.297") as per Dwg D3582.

8- open ground wear holes to 0.391" as per section B-B

9-Open Aft Cap holes using .209" drill.

10-Drill pilot holes for section D-D and E-E. Holes must be laid out by hand. Mark out Center line and make sure that 6.65 and 5.906 measurements are respected. Double check before drilling, do not open holes to finish size.

CF

12-3-13  
12-02-24  
CF

1 CF 12-3-13

SAD 12-03-15

W/O:		WORK ORDER CHANGES					
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Page 4

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Approvals: Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop **\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

170

Chemical Conversion Coat per QSI005 4.1

0.00

**\*170\***

HandFinish

Memo

0.00

Hand Finishing

1 / GF 12-3-16

180

QC3- Inspect Part Finish

0.00

**\*180\***

QC

Memo

0.00

Quality Control

DP 12-3-16

W/O:		WORK ORDER CHANGES					
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Process Plan:

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Tooling:

Date:

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Date:

SPC (Y/N):

Date:

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Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

190

0.00

**\*190\***

Skidtubes

Skidtubes

Memo

0.00

1-Open X-Bolt holes to finish size as per Dwg D3582, all sections

2-Counter Sink X-BOLT holes as per Dwg D3582

3-Deburr and blow out chips from inside of tube, prep. tube for welding.

4-Bond web as per Dwg D3582 &amp; QSI 015

A/R 241 Sike Flex

Batch: 120813

Exp Date: 12/08/13

5-Weld x-bolt spacers(D2973) as per Dwg D3582 section B-B.

A/R AL ROD

Batch: M120164

6-Grind welds flush

200

QC10- Inspect visual per QSI004- ground welds

0.00

**\*200\***

QC

Memo

0.00

Quality Control

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**\*80467\***

Page 6

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Reference:

Approvals: Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

210

QC5- Inspect part completeness to step on W/O

0.00

**\*210\***

QC

Memo

0.00

Quality Control

215

Pressure Wash per QSI005 4.3

0.00

**\*215\***

HandFinish

Memo

0.00

Hand Finishing

Touch-up alodine as per QSI

220

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

**\*220\***

Powdercoat

Memo

0.00

Powder Coating

START TIME 8h10  
OVEN TEMPERATURE: 320°F  
FINISH TIME: 8h40

m 120222

1 12-3-21 12/03/23.

W/O:		WORK ORDER CHANGES					
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Page 7

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Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

230

QC3- Inspect Part Finish

0.00

**\*230\***

QC

Memo

0.00

Quality Control

1 0 21 12/03/12

250

HandFinishing

0.00

**\*250\***

HandFinish

Memo

0.00

Hand Finishing

1 0 21 12/03/12

2-Install Aft cap as per Dwg D3582, Detail "C"

A/R 241 Sika Flex Batch: M120813

Exp Date: 12/08

3-Install Wearplates as per Dwg D3582,

Note: Install Bolt and washer on Ground Wire inserts on top of tube see section D-D of dwg D3582

\*\*\*\*\*Do not install bolts where indicated on Dwg(Note #6)\*\*\*\*\*

A/R 241 Sika Flex Batch: M120813

Exp Date: 12/08

4-assemble o-ring as per dwg D3492 and apply o-ring lube

A/R 55-o-ring lube batch: M110348

5- Wing Walk as per Dwg D3582 and QSI 005 4.4 M120902

W/O:		WORK ORDER CHANGES					
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QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

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DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

260

QC5- Inspect part completeness to step on W/O

0.00

**\*260\***

QC

Memo

0.00

Quality Control

270

Packaging

0.00

**\*270\***

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D117-762-041

Location: \_\_\_\_\_

PPP Rev: \_\_\_\_\_

280

QC21- Final Inspection - Work Order Release

0.00

**\*280\***

QC

Memo

0.00

Quality Control

12-03-29

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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February-21-12 1:07:10 PM

Page 2

Work Order ID: 80467

\*80467\*

Parent Item: D117-762-041

\*D117-762-041\*

Parent Item Name: Replacement Skidtube

Start Date: 21/02/2012

Required Date: 06/03/2012

Start Qty: 1.00

Required Qty: 1.00

D2964	Manufactured	No	140	Each	29.0000	1	1
-------	--------------	----	-----	------	---------	---	---

\*D2964\*

Cap

\*\*

BE 12/03/15

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

LG002	29	
74719	29	

D2971	Manufactured	No	190	Each	34.0000	1	1
-------	--------------	----	-----	------	---------	---	---

\*D2971\*

Cross Bolt Spacer

\*\*

BE 12/03/17

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

LG001	34	
74720	34	

D3584-1	Manufactured	No	190	Each	2.0000	1	1
---------	--------------	----	-----	------	--------	---	---

\*D3584-1\*

Web

\*\*

BE 12/03/16

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

LG	2	
75189	2	

D2973	Manufactured	No	190	Each	58.0000	2	2
-------	--------------	----	-----	------	---------	---	---

\*D2973\*

Cross Bolt Spacer

\*\*

BE 12/03/17

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

LG002	58	
14636	58	

D3662-3	Manufactured	No	190	Each	1.0000	1	1
---------	--------------	----	-----	------	--------	---	---

\*D3662-3\*

Crossbolt Spacer

\*\*

BE 12/03/17

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

LG001	1	
44456	1	

W/O:		WORK ORDER CHANGES					
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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February-21-12 1:07:10 PM

Page 3

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**\*D117-762-041\***

Parent Item Name: Replacement Skidtube

Start Date: 21/02/2012

Required Date: 06/03/2012

Start Qty: 1.00

Required Qty: 1.00

D3662-1 Manufactured No

190 Each 25.0000 3 3

**\*D3662-1\***

Crossbolt Spacer

\*\*

BE 12/03/17

Location

Loc Qty

Loc Code

LG001

25

71799

1

71857

24

3

ALS4-1032-130 Purchased No

Each 2,049.000 36

**\*AI S4-1032-130\*** X ALS4-1032-130

Insert

\*\*

11180181 (136) 110 12/03/22

Location

Loc Qty

Loc Code

ST280

1116

119084

116

120671

1000

ST281

933

119632

3

120410

930

ALS4-428-165 Purchased No

Each 469.0000 2

**\*AI S4-428-165\***

Inserts

\*\*

ML 12/03/26

Location

Loc Qty

Loc Code

FP002

469

114172

18

117769

451

X2

D2965 Manufactured No

250 Each 22.0000 1 1

**\*D2965\***

Cap, 105 Skidtube

\*\*

ML 12/03/26

Location

Loc Qty

Loc Code

FP002

22

71371

22

Y

February-21-12 1:07:10 PM

Shop Packet Print

Page 3

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Parent Item Name: Replacement Skidtube

Start Date: 21/02/2012

Required Date: 06/03/2012

Start Qty: 1.00

Required Qty: 1.00

D3508-3 Manufactured No

250

Each

11.0000

1

1

**\*D3508-3\***

Wearplate

\*\*

*upl 12/03/12 (v1)*

Location

Loc Qty

Loc Code

FP001

11

38527

1

76264

10

D3508-9 Manufactured No

250

Each

6.0000

1

1

**\*D3508-9\***

Wearplate

\*\*

*u 12/02/12*

Location

Loc Qty

Loc Code

FP001

6

72203

6

D3558-3 Manufactured No

250

Each

11.0000

1

1

**\*D3558-3\***

Gasket

\*\*

*u 12/03/12*

Location

Loc Qty

Loc Code

FP002

11

71651

1

75179

10

D3558-9 Manufactured No

250

Each

4.0000

1

1

**\*D3558-9\***

Gasket

\*\*

*B80340 (v1) u 12/03/12*

Location

Loc Qty

Loc Code

FP002

4

71212

4

W/O:		WORK ORDER CHANGES					
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Page 5

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Parent Item Name: Replacement Skidtube

Start Date: 21/02/2012

Required Date: 06/03/2012

Start Qty: 1.00

Required Qty: 1.00

D3558-11 Manufactured No

250 Each

5.0000 1 1

\*D3558-11\*

Gasket

\*\*

11/03/26

Location

Loc Qty

Loc Code

FP002

5

72202

5

D3558-13 Manufactured No

250 Each

9.0000 1 1

\*D3558-13\*

Gasket

\*\*

11/03/26

Location

Loc Qty

Loc Code

FP002

9

59558

9

D3508-11 Manufactured No

250 Each

4.0000 1 1

\*D3508-11\*

Wearplate

\*\*

1380324(x1) 11/03/26

Location

Loc Qty

Loc Code

FP001

4

72011

4

D3508-13 Manufactured No

250 Each

11.0000 1 1

\*D3508-13\*

Wearplate

\*\*

11/03/26

Location

Loc Qty

Loc Code

FP001

11

71027

2

71794

9

AN960JD10L NAS1149D03321 Purchased No

250 Each

0.0000 2 2

\*AN960JD10I \*

Washer

\*\*

11120644(x2) 11/03/26

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

February-21-12 1:07:10 PM

Page 6

Work Order ID: 80467

**\*80467\***

Parent Item: D117-762-041

**\*D117-762-041\***

Parent Item Name: Replacement Skidtube

Start Date: 21/02/2012

Required Date: 06/03/2012

Start Qty: 1.00

Required Qty: 1.00

AN3C4A

Purchased

No

250

Each

3,439.000

28

28

**\*AN3C4A\***

BOLT

**\*\***

11/20/76 9/128/ 11/20/12

Location

Loc Qty

Loc Code

ST350

3439

117313

2

117688

5

117872

10

118112

16

118451

2

119749

10

120187

2000

120423

394

120521

1000

AN3C5A

Purchased

No

250

Each

1,038.000

2

2

**\*AN3C5A\***

Bolt

**\*\***

11/20/76 9/128/ 11/20/12

Location

Loc Qty

Loc Code

FP001

7

115835

7

ST350

1031

116419

28

117343

13

117764

7

117872

2

119127

24

119749

27

120423

930

12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

February-21-12 1:07:10 PM

Page 7

Work Order ID: 80467

**\*80467\***

Parent Item: D117-762-041

**\*D117-762-041\***

Parent Item Name: Replacement Skidtube

Start Date: 21/02/2012

Required Date: 06/03/2012

Start Qty: 1.00

Required Qty: 1.00

AN960JD416L NAS1149D0416J Purchased

No

250

Each

8.0000

2

2

**\*AN960JD416I \*** ✓

Washer

\*\*

11120833 (x2) MU 1103126

Location

Loc Qty

Loc Code

FP002

8

110153

8

AN960C10L NAS1149C0332 Purchased

No

250

Each

0.0000

28

28

**\*AN960C10I \*** ✓

washer

\*\*

11120648 (x2) MU 1103126

AN4-4A

Purchased

No

250

Each

127.0000

2

2

**\*AN4-4A\***

Bolt

\*\*

MU 1103126

Location

Loc Qty

Loc Code

FP001

10

114615

10

ST355

117

114615

17

120187

100

NAS1611-012 Purchased

No

250

Each

54.0000

6

6

**\*NAS1611-012\***

O-RING

\*\*

MU 1103126

Location

Loc Qty

Loc Code

FP001

54

113845

10

118384

44

x6

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

February-21-12 1:07:10 PM

Page 8

Work Order ID: 80467

Parent Item: D117-762-041

Parent Item Name: Replacement Skidtube

\*80467\*

\*D117-762-041\*

Start Date: 21/02/2012

Required Date: 06/03/2012

Start Qty: 1.00

Required Qty: 1.00

NAS1611-015

Purchased

No

250

Each

119.0000

2

2

**\*NAS1611-015\***

O-RING

\*\*

u 1103126

Location

Loc Qty

Loc Code

FP001

119

115101

85

116081

34

NAS1611-016

Purchased

No

250

Each

72.0000

2

2

**\*NAS1611-016\***

O-RING

\*\*

u 1203126

Location

Loc Qty

Loc Code

FP001

72

112492

46

113524

26

x2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

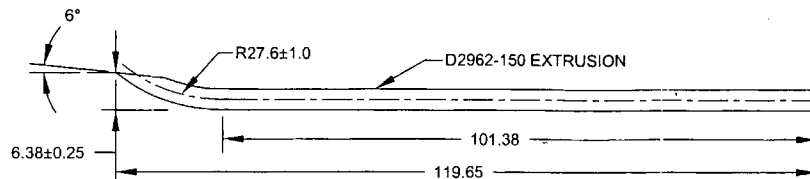


# PARTS LIST FOR D3582-041 SKIDTUBE ASSEMBLY

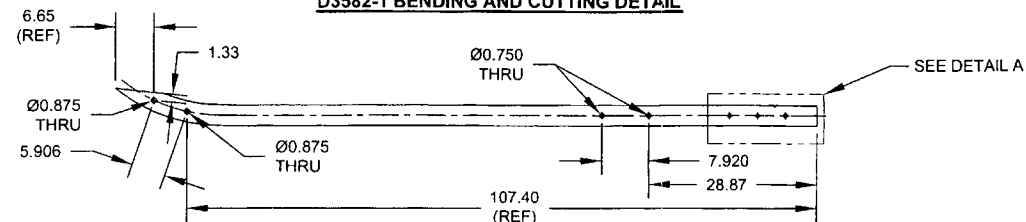
Qty	Part Number	Description
X	D3582-041	SKIDTUBE ASSEMBLY
1	D2962-150	EXTRUSION
1	D2964	CAP
1	D2965	CAP
1	D2971	CROSS BOLT SPACER
2	D2973	CROSS BOLT SPACER
2	D3492-049	PLUG ASSEMBLY
2	D3492-051	PLUG ASSEMBLY
6	D3492-053	PLUG ASSEMBLY
1	D3508-3	WEARPLATE
1	D3508-9	WEARPLATE
1	D3508-11	WEARPLATE
1	D3508-13	WEARPLATE
1	D3558-3	GASKET
1	D3558-9	GASKET
1	D3558-11	GASKET
1	D3558-13	GASKET
1	D3584-1	WEB
3	D3662-1	CROSS BOLT SPACER
1	D3662-3	CROSS BOLT SPACER
36	AELS-1032-130	INSERT
2	ALS7-428-165	INSERT
28	AN3C4A	BOLT
2	AN3-5A	BOLT
2	AN4-4A	BOLT
28	AN960C10L	WASHER
2	AN960JD10L	WASHER
2	AN960JD416L	WASHER

## GENERAL NOTES:

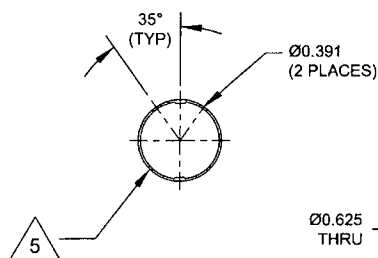
- ALL DIMENSIONS ARE IN INCHES
- TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- WELDING TO BE DONE PER DART QSI 004.
- INSERT D3584-1 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015 AFTER BENDING.
- USE DART DRILL TEMPLATE DT8900 TO LOCATE AND DRILL  $\varnothing 0.297$  HOLES (36 PLACES) FOR WEARSHOE INSERTS. INSTALL AELS-1032-130 PER SECTION G-G (36 PLACES) AFTER FINISH. SEAL WEARPLATE BOLTS WITH SIKAFLEX-241/-291.
- DO NOT INSTALL AN3C4A BOLTS AND AN960C10L WASHERS IN INDICATED LOCATIONS.
- FINISH:
  - CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSERTING D3584-1 WEB.
  - POWDER COAT ASSEMBLY GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3.
  - ANTI-SKID PAINT AS INDICATED TO 1.00 ABOVE CENTER LINE PER DART QSI 005 4.4



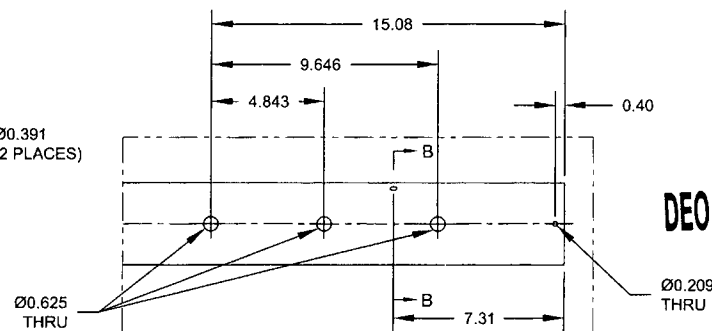
D3582-1 BENDING AND CUTTING DETAIL



D3582-1 DRILLING DETAIL



SECTION B-B  
SCALE 1:5



DETAIL A  
SCALE 1:5

DEO ATTACHED

RELEASED  
07.11.22

A	NEW ISSUE	PH	07.06.08
REV.	DESCRIPTION	BY	DATE
DESIGN	PH		
DRAWN	PH		
CHECKED	PH		
MFG. APPR.	PH		
APPROVED	PH		
DE APPR.	PH		
DATE	07.06.08		

DART AEROSPACE USA, INC  
PORT HADLOCK, WA

DRAWING NO. REV. A

D3582 SHEET 1 OF 2

TITLE SCALE

BK 117 SKIDTUBE ASSEMBLY 1:20

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80467  
12/02/21  
MLJ

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

80467

D2964 CAP  
(GRIND FLUSH)DETAIL C  
SCALE 1:10

D2971 SPACER

AFTER FINISH  
INSTALL  
D3492-049  
PLUG ASSEMBLY  
(2 PLACES)SECTION D-D  
SCALE 3:10AFTER FINISH  
INSTALL  
D3492-051  
PLUG ASSEMBLY  
(2 PLACES)SECTION E-E  
SCALE 3:10

D3662-3 SPACER

DETAIL C  
D  
E  
D3558-9  
D3508-9  
NO BOLTS AT  
THESE LOCATIONS

D3582-041 ASSEMBLY DETAIL

NO BOLTS AT  
THESE LOCATIONS

BLACK ANTI-SKID

BLACK ANTI-SKID (TYP)

D3582-041 BLACK ANTI-SKID DETAIL

## SECTION D-D NOTES

AFTER BENDING AND DRILLING ASSEMBLY  
PERFORM THE FOLLOWING:

1. CHAMFER HOLE 0.030 x 45°
2. INSERT D2971 SPACER
3. WELD INTO PLACE AND GRIND FLUSH
4. PASS Ø0.750 DRILL TO REMOVE SPILL OVER
5. AFTER FINISH, INSTALL D3492-049 PLUG ASSEMBLY (2 PLACES)

## SECTION E-E NOTES

AFTER BENDING AND DRILLING ASSEMBLY  
PERFORM THE FOLLOWING:

1. CHAMFER HOLE 0.030 x 45°
2. INSERT D3662-3 SPACER
3. WELD INTO PLACE AND GRIND FLUSH
4. PASS Ø0.672 DRILL TO REMOVE SPILL OVER
5. AFTER FINISH, INSTALL D3492-051 PLUG ASSEMBLY (2 PLACES)

D2973 SPACER  
(2 PLACES)SECTION F-F  
SCALE 3:10

## SECTION F-F NOTES

AFTER BENDING AND DRILLING ASSEMBLY  
PERFORM THE FOLLOWING:

1. CHAMFER HOLE 0.030 x 45°
2. INSERT D2973 SPACER (2 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. PASS Ø0.625 DRILL TO REMOVE SPILL OVER

D3584-1 WEB (REF)

D3662-1 SPACER  
(3 PLACES)AFTER FINISH, INSTALL  
AELS-1032-130  
INSERT (36 PLACES)AN3C4A BOLT (1)  
AN960C10L WASHER (1)  
(28 PLACES)SECTION G-G  
SCALE 3:10

## SECTION G-G NOTES

AFTER BENDING AND DRILLING ASSEMBLY  
PERFORM THE FOLLOWING:

1. CHAMFER HOLE 0.030 x 45°
2. INSERT D3662-1 SPACER (3 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. PASS Ø0.515 DRILL TO REMOVE SPILL OVER
5. AFTER FINISH, INSTALL D3492-053 PLUG ASSEMBLY (6 PLACES)

AFTER FINISH, INSTALL  
ALS7-428-165 INSERT (1)  
AN4-4A BOLT (1)  
AN960JD416L WASHER (1)  
(2 PLACES)AFTER FINISH  
INSTALL,  
D3492-053  
PLUG ASSEMBLY  
(6 PLACES)D3584-1 WEB  
(REF)

4 7

SEAL WITH  
SIKAFLEX -241/-291

D2965 CAP

DETAIL H  
SCALE 1:5AN3-5A BOLT (1)  
AN960JD10L WASHER (1)  
(2 PLACES)

RELEASED

DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	PH	PORT HADLOCK, WA	
CHECKED	PH	DRAWING NO.	REV. A
MFG. APPR.	PH	D3582	SHEET 2 OF 2
APPROVED	PH	TITLE	SCALE
DE APPR.	PH	BK 117 SKIDTUBE ASSEMBLY	1:20
DATE	07.06.08	COPYRIGHT © 2007 BY DART AEROSPACE USA, INC	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC			

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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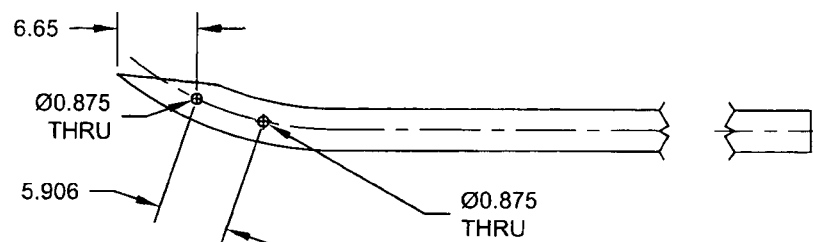
**NOTE:** Date & initial all entries

80467

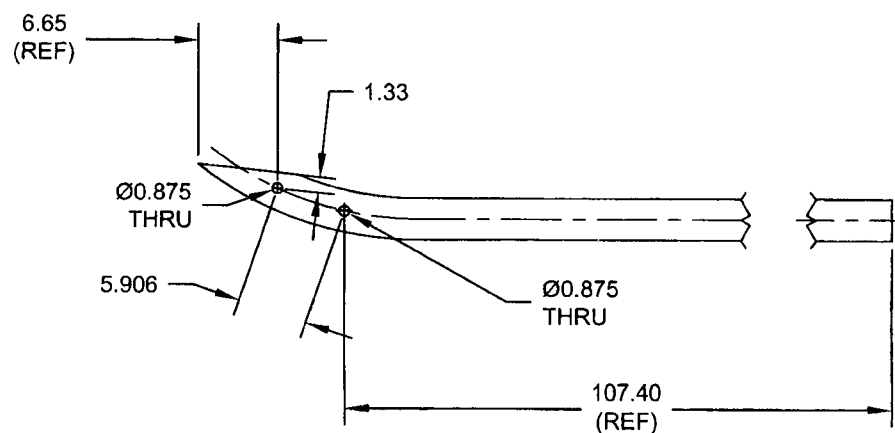
DRAWING NO. D3582	TITLE BK 117 SKIDTUBE ASSEMBLY	REV. A	<b>DART AEROSPACE USA, INC</b>	D.E.O. NO. D3582-A-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>PH</i>	CHECKED <i>[Signature]</i>	MFG. APPR. <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DE APPR. <i>[Signature]</i>		
DATE 09.04.06	DATE 04.04.06	DATE 09.04.06	DATE 12/24/06	DATE 09.04.06		

FOR EASE OF MANUFACTURE AND TO ENSURE THE FIT OF BRISTOL WIRESTRIKE SKID GEAR DEFLECTOR:  
UPDATE DIMENSIONING OF 2 FWD HOLES ON SHEET 1 AS SHOWN

IS:



WAS:



**RELEASED**  
09/04/22 *[Signature]*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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